KA33V

Voltage Stabilizer

Features

- Low Temperature Coefficient
- Low Dynamic Resistance
- Typical Reference Voltage of 33V

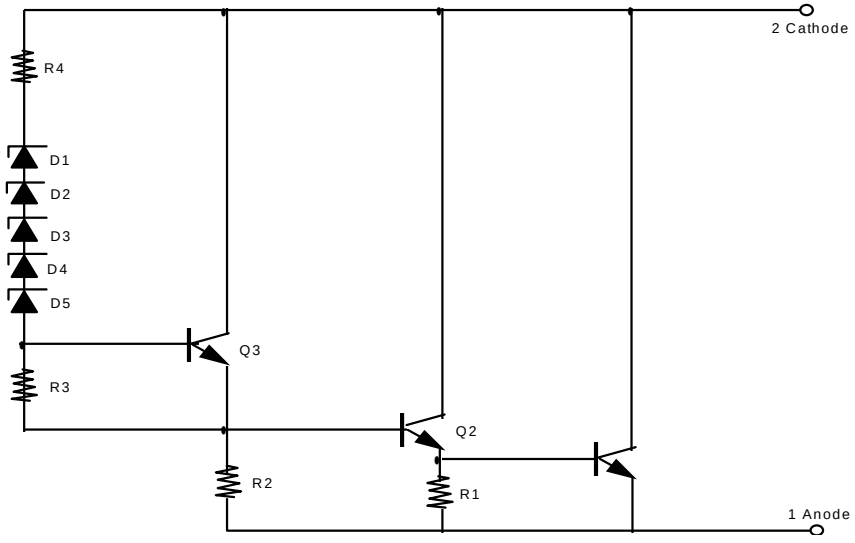
Description

The KA33V is a monolithic integrated voltage stabilizer especially designed as voltage supplier for electronic tuners.

TO-92

1. Anode 2. Cathode

Schematic Diagram



Absolute Maximum Ratings (T_A= 25°C)

Parameter	Symbol	Value	Unit
Zener Current	I_Z	10	mA
Power Dissipation (T_A = 75°C)	P_D	200	mW
Operating Ambient Temperature Range	T_{OPR}	-20 ~ 75	°C
Storage Temperature Range	T_{STG}	-40 ~ 125	°C

Electrical Characteristics (T_A = 25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Stabilized Voltage	V_Z	I_Z = 5mA	31		35	V
Stabilized Voltage-Temperature Drift	$\Delta V_Z/\Delta T$	I_Z = 5mA T_A = -20 to 75°C	-1	0	1	mV/°C
Dynamic Resistance	R_Z	I_Z = 5mA, f = 1KHz	-	10	25	-

Measuring Circuits

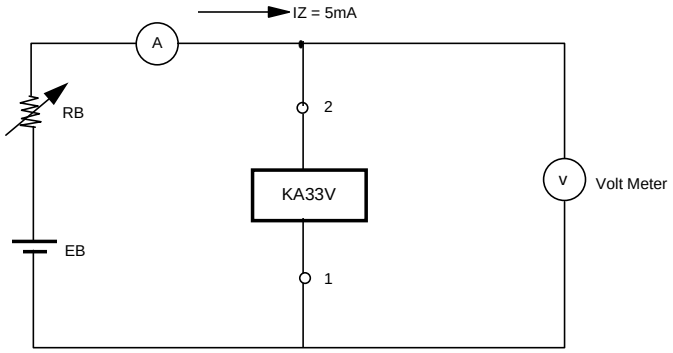


Figure 1. Measuring Circuit for Stabilized Voltage V_Z

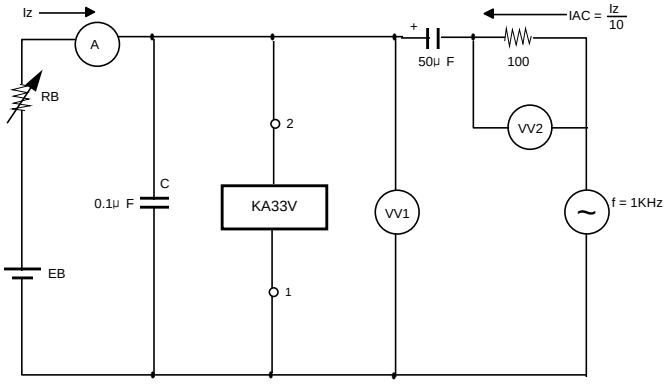


Fig. 3

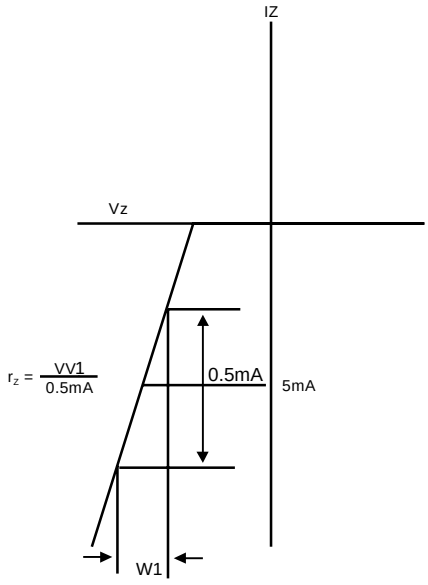
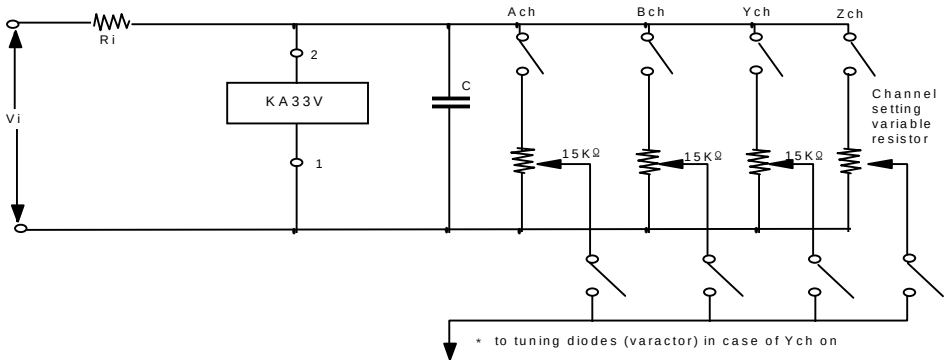
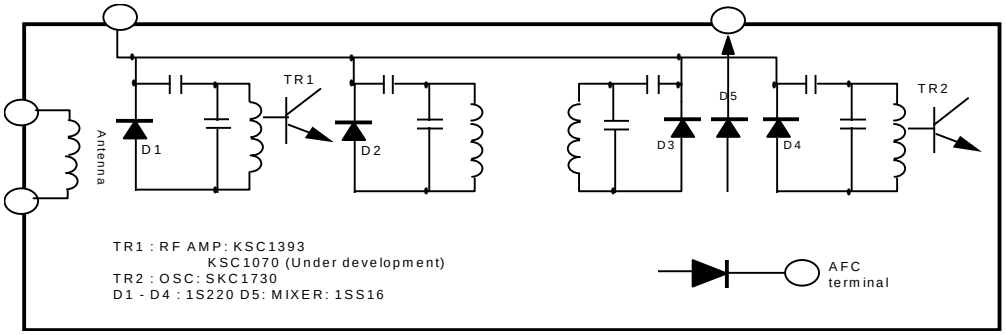


Figure 2. Measuring Circuit for Dynamic Resistance

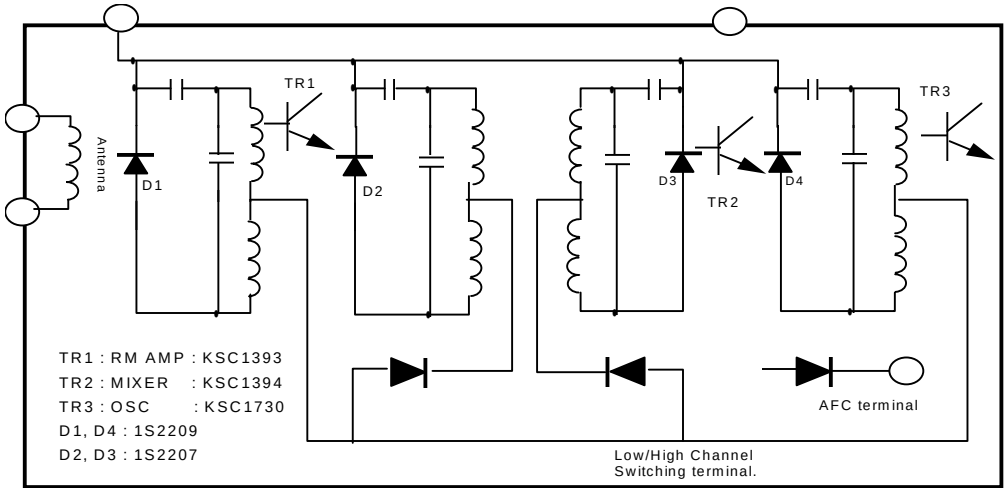
Typical Application



1) UHF Tuner



2) VHF Tuner



Power-temperature Derating Durve Typical Characteristic Curves

(T_A = 25°C)

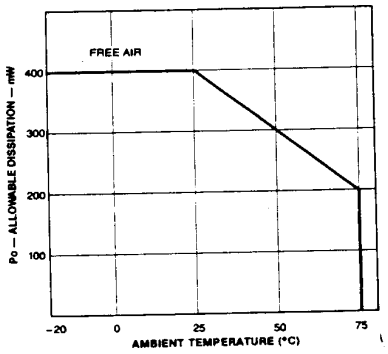


Figure7. Allowable Dissipation vs. Amblent Temperature

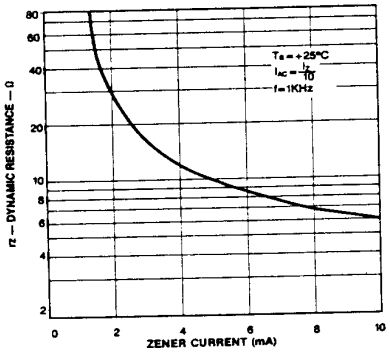


Figure8. Dynamic Resistance vs. Zener Current

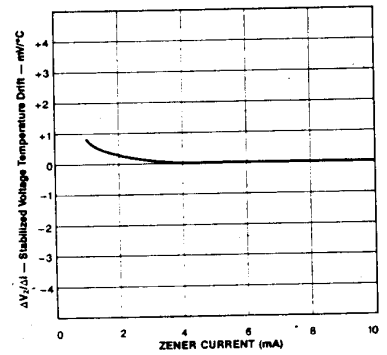


Figure9. Stabilized Voltage Temperature Drift vs. Zener Current

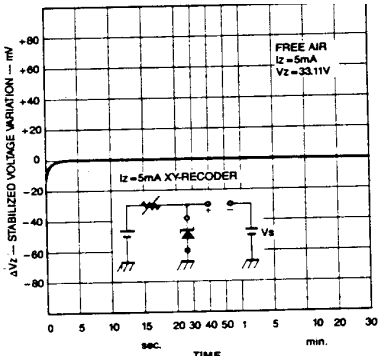


Figure10. Stabilized Voliage Variation vs. Time

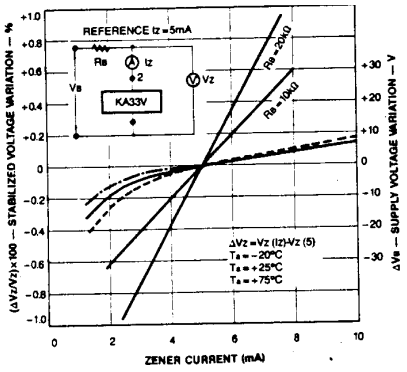


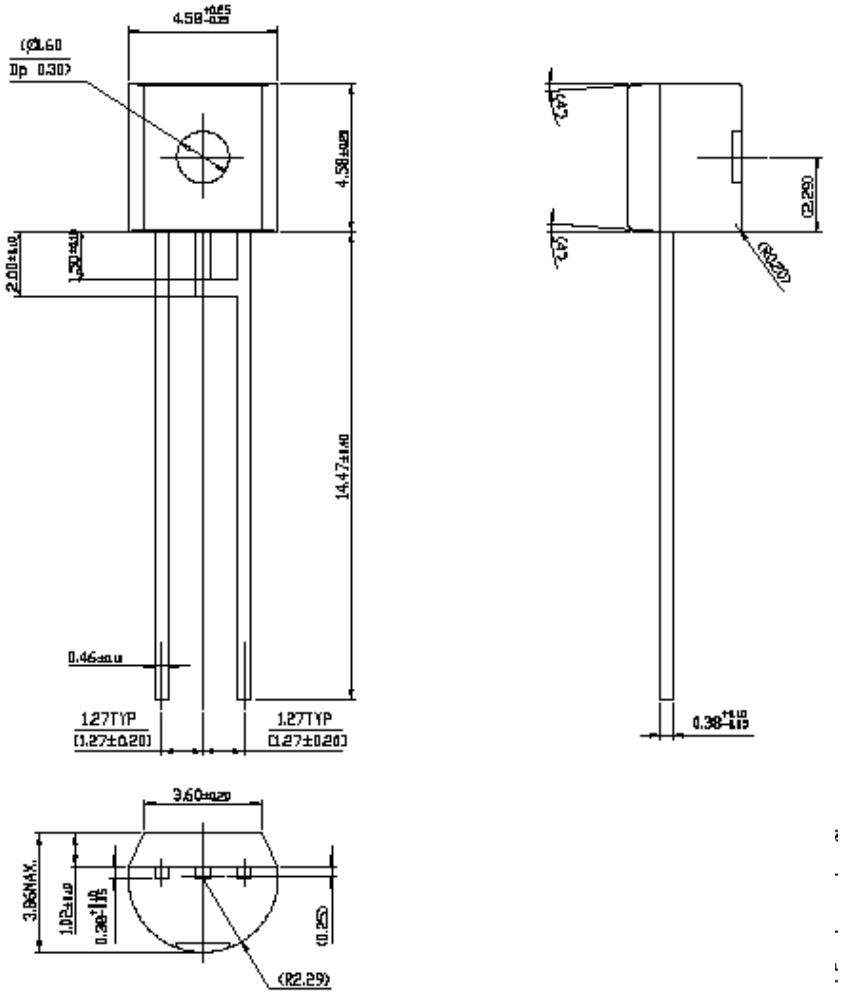
Figure11. Stabilized Voltage Variation & Supply Voltage Variation vs. Zener Current

Mechanical Dimensions

Package

Dimensions in millimeters

TO-92



Ordering Information

Product Number	Package	Operating Temperature
KA33V	TO-92	